

Study #11 Recreation and Public Use Impact Assessment

November 28, 2001

1.0 Introduction/Background

This study will analyze recreation and public use impacts to vegetation, cultural resources, soils, and water quality in the Study Area vicinity. Other recreation and public use impact assessment studies will be reviewed and used as a basis for this study.

2.0 Study Objective

The objective of this study is to assess recreation and public use impacts to vegetation, soils, and water quality to Study Area lands and waters. These resources are particularly important to the recreation, fisheries, and visual quality of the Study Area.

Topics to address related to potential recreation impacts within the Study Area include:

- Soil erosion and soil compaction, especially within and adjacent to campground trails and day use areas (DUAs)
- Impacts to wetlands and riparian vegetation from visitor use
- Shoreline erosion from boat wakes and/or wind waves
- Lack of downed wood in high use areas due to wood collection for fire fuel/fuel load reductions
- Impacts to vegetation due to off-road vehicle (ORV) use and pedestrian use
- Water quality impacts due to soil erosion and sanitation problems at or near campgrounds and day use areas
- Litter in recreation areas
- Sanitation issues in recreation areas
- Cultural resources

This study will be done in conjunction with Study #10—Recreation Facility and Condition Inventory.

3.0 Relationship to Relicensing/Need for the Study

This study is needed because Federal Energy Regulatory Commission (FERC) regulations require a comprehensive recreation plan. The purpose of the study is to compile and analyze field data collected in the Study Area related to ecological impacts at developed recreation sites and undeveloped dispersed recreation sites. This analysis is qualitative and does not address detailed water quality and detailed erosion conditions of the shorelines which are being studied by the Environmental Work Group.

This study addresses Issue Statement R1—adequacy of existing project recreation facilities, opportunities, and access to accommodate current use and future demand and R4—adequacy of operations and maintenance and clean-up activities associated with existing and new recreation areas to provide a quality recreation experience. They specifically address Issues RE 1, 2, 5-39, 53, 55, 56, 60, 61, 64-83, 85, 87-89, 95, 96, 104 and 105.

4.0 Study Area

The Study Area includes Lake Oroville, the lands and waters within and adjacent to (1/4 mile) the FERC project boundary, and adjacent land, facilities, and areas with a clear project nexus. The following developed recreation areas and sites are part of the Study Area:

- Thermalito Afterbay facilities
- Thermalito North Forebay facilities
- Thermalito South Forebay facilities
- Diversion Pool facilities
- Spillway Boat Ramp/Overflow Camping
- Dam/Overlook Area
- Lake Oroville Visitor Center
- Bidwell Canyon Marina and other nearby facilities
- Car-Top Boat Launch Areas (BLAs) such as Stringtown, Dark Canyon, Foreman Creek, Nelson Bar, and Vinton Gulch
- Low flow channel of the Feather River
- Clay Pit State Vehicular Recreation Area (SVRA)
- Feather River fish hatchery (public areas)
- Loafer Creek facilities
- Lime Saddle Marina and other nearby facilities
- Foreman Creek Boat-In Campsite (BIC)
- Enterprise BLA
- Craig Saddle BIC
- Bloomer Primitive BIC
- Goat Ranch BIC
- Oroville Wildlife Area (OWA)
- Selected Primary Equestrian Trailheads
- Selected Primary Mountain Bike/Hiking Trailheads

Impacts will also be assessed for dispersed (undeveloped) lakeside (Lake Oroville, Thermalito Forebay, and Thermalito Afterbay) recreation sites. This will also include trails on or near these shorelines. The water conveyance system (pipelines, penstocks, canals, flumes, etc.) corridors will not be investigated as part of this study.

5.0 General Approach

Detailed Methodology and Analysis Procedures

This study will provide a qualitative assessment of recreational impacts in the Study Area. It will focus on developing a good overall assessment of public use recreation-related impacts in and adjacent to Study Area recreation sites. The results of this study will provide a baseline of information for future long-term monitoring of public recreational impacts. Data from this study will also be used to assess the conditions of recreation sites and use areas presented in Study #10.

Task 1—Develop Site Impact Assessment Forms

Impact assessment forms will be developed in this task. A sample form is included in Attachment A.

Task 2—Conduct Field Work and Site Mapping and Photography

EDAW will solicit input from the California Departments of Water Resources (DWR) and Parks and Recreation (DPR), the United States Forest Service (USFS), and staff to identify areas for field observations. Researchers will then drive and walk through the study area looking for recreation-related impacts. For each site where recreational impacts have been identified, the following field data will be collected:

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- Site photography of significant impact areas; and
 - Site locator identification in GIS including the type of site.

The impact forms developed in Task 1 will be filled out as part of Task 2 activities. To assess the recreational impacts, each site will be visited and potential impacts will be identified, primarily in a qualitative fashion. Beach erosion and boat wake impacts will be assessed via a pedestrian survey of shorelines where soil erosion is prevalent. Specific impacts that will be identified, if present, include impacts originating from vehicular and foot traffic; illegal dumping of waste; littering; illegal wood cutting; vegetation removal; motorcycle/OHV use; vandalism; illegal campfires; gate lock cutting; grazing; and squatters/dispersed camping.

Task 3—Draft Final Report Preparation

The results of Tasks 1 and 2 will be presented in a Draft Final Report. The report will include detailed inventory tables of public use impacts observed by site, plus text descriptions of sites and impacts, site photography of significant sites or impacts, and GIS mapping of dispersed sites and significant impact areas, if any.

6.0 Results and Products/Deliverables

Results

The results of this study will focus on ecological impacts at developed and undeveloped recreation facilities in the Study Area. Ecological impacts (erosion, vegetation damage, litter, etc.) at public developed and dispersed undeveloped recreation sites within the Study Area will be discussed and listed in a table. In addition to developing an assessment of current conditions as a result of recreation and public open space use, the results of this study also will provide baseline information for future long-term monitoring of public recreational impacts.

Products/Deliverables

The following product will be developed for this study:

- Draft Final Report

The Draft Final Report will summarize the recreational impacts by site, will include photography of significant sites, and GIS maps of dispersed sites and significant impact areas. It will contain an executive summary; an introduction including goals and objectives; methods; results; and a discussion including implications for current recreation management and preliminary areas of suitability for future recreation development.

7.0 Coordination and Implementation Strategy

Coordination with Other Resource Areas/Studies

This study, where applicable, will provide data for portions of Study #10—Recreational Facility and Condition Inventory. The fieldwork included in this task will also be conducted in conjunction with Study #10.

GIS-based mapping will be needed. Coordination will also have to occur with the various resource studies (e.g., botanical mapping, Threatened and Endangered Species (TES) mapping, water quality study) that are being led by the Environmental Work Group. There will also have to be coordination with the studies led by the Land Use, Land Management, and Aesthetics Work Group, as well as studies led by the Cultural Resources Work Group.

Issues, Concerns, Comments Tracking/Compliance Requirements

This study addresses Issue Statement R1—adequacy of existing project recreation facilities, opportunities, and access to accommodate current use and future demand and R4—adequacy of operations and maintenance and clean-up activities associated with existing and new recreation areas to provide a quality recreational experience. It specifically addresses Issues RE 1, 2, 5-39, 53, 55, 56, 60, 61, 64-83, 85, 87-89, 95, 96, 104 and 105.

8.0 Study Schedule

Data collection: April through June 2002.

Data analysis and report writing: July 2002.

Draft Final Report due: August 2002.

Attachment A
Sample Impact Assessment Form

PROJECT: _____

SITE NAME: _____

DATE: _____

LAND OWNERSHIP: _____ **RESEARCHER:** _____ **ROLL:** _____ **PHOTO:** _____

INDICATORS	NOTES
General Site Description	
Built Features	
Bare Ground and Compaction	
Litter and Debris	
Sanitation Problems	
Erosion	
Vegetation Damage	
Proximity to Wetlands	
Proximity to Riparian	
Man-made Disturbances	
Other	